



12
 $\rightarrow 17$
 $\leftarrow 10$

$$\sum_{k=1}^m \frac{|n - x_k| (1 + |n - x_k|)}{2} = f(n)$$

$$\sum_{k=1}^m \frac{|n - x_k|}{2} + \frac{(n - x_k)^2}{2} = f(n)$$

$$f'(n) = mn - x_{\text{sum}} + \sum_{k=1}^m \frac{\text{sgn}(n - x_k)}{2} = mn - x_{\text{sum}} + \frac{1}{2} \sum_{k=1}^m \text{sgn}(n - x_k)$$

$$0 = mn - x_{\text{sum}} + \frac{1}{2} \sum \text{sgn}(n - x_k)$$

$$\frac{x_{\text{sum}} - \frac{1}{2} \sum_{k=1}^m \text{sgn}(n - x_k)}{m} = n$$

$$\text{mean} - \frac{1}{2m} \sum_{k=1}^m \text{sgn}(n - x_k) = n$$

$$n \in \left[\text{mean} - \frac{1}{2}, \text{mean} + \frac{1}{2} \right]$$